CALIFORNIA BIOENERGY

Plugging dairies into a renewable future

California Public Utility Commission

May 23, 2019 Workshop

Interconnection Issues

1. Uniform program – across both utilities
   - Same study process
   - Same contracts
2. Uniform Flow rate – based on hours of operation
   - Systems (upgraders, compressors, interconnections) are built for growth – decreasing emissions, improving economies.
   - Biological process – with significant seasonal variation
   - Equipment has minimum flow rates. Result only a number of hours a day operating, in the winter and initial years
   - Consistent flow rates in contracts need to be limited to hours of operation, not requiring operations 24 hours/day

Interconnection Issues

3. Imbalances – need to watch

- Expectation – CP agreement provides needed flexibility, including balancing across projects and with outside parties
- Concern – over delivery: utility will buy the excess gas. Financial penalty is not the issue. Issue is what happens to the credits

4. Btu Districts

- Understandable – but expensive and not needed in transmission line interconnections

5. Transparency into long-term demand

- Rural pipelines. Pressure to reduced natural gas use. Don't want stranded assets/failed projects

Interconnection Issues

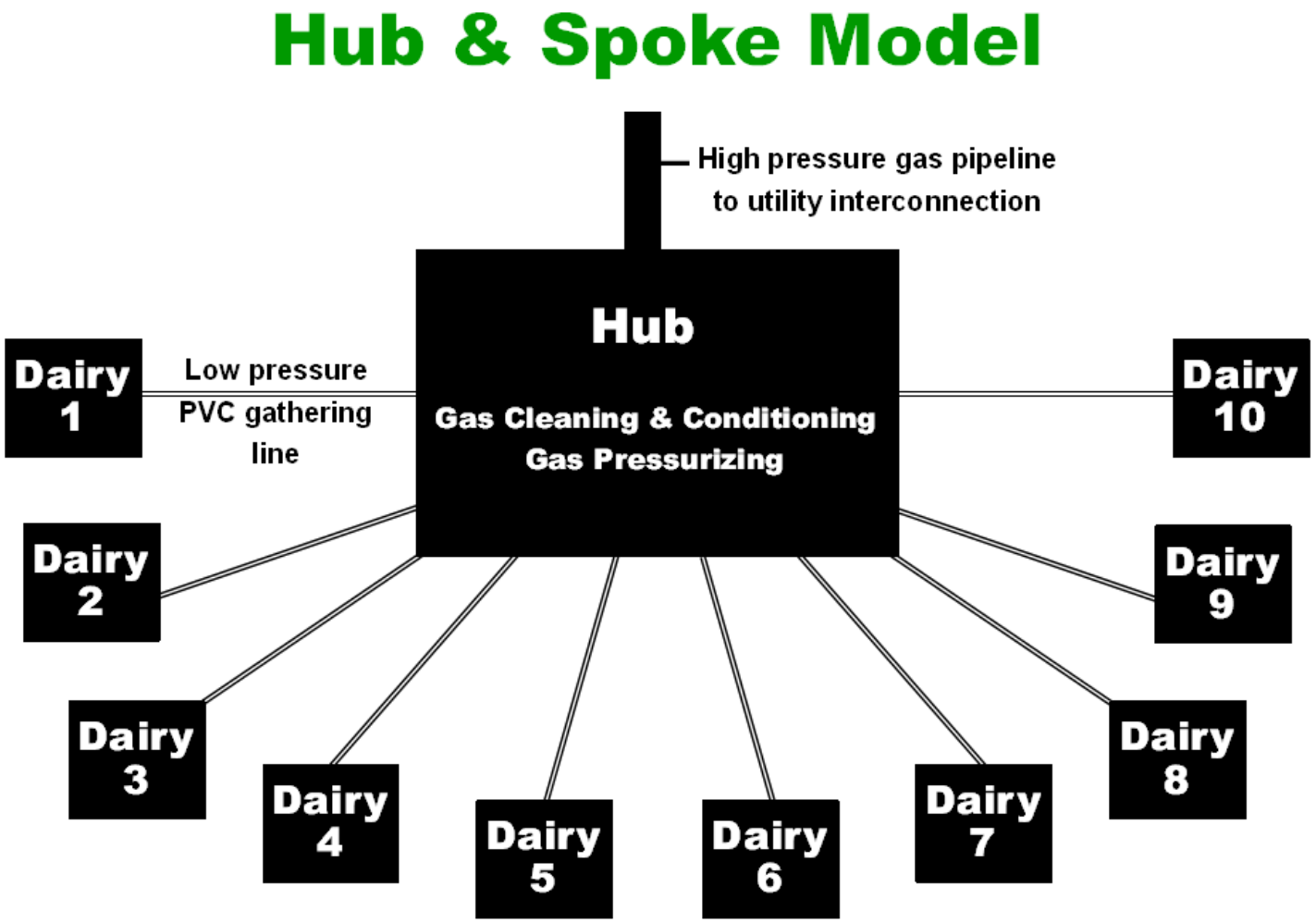
6. Expansion of AB 2313 program: 50% of interconnection costs up to $5MM for a dairy cluster. Projects need certainty

- Significant funding expansion
- Queue, transparency – know you will receive reimbursement
- Fund dairy gathering line expansions –
  - Match funding after initial build
  - Leverage infrastructure
  - Benefit smaller dairy projects

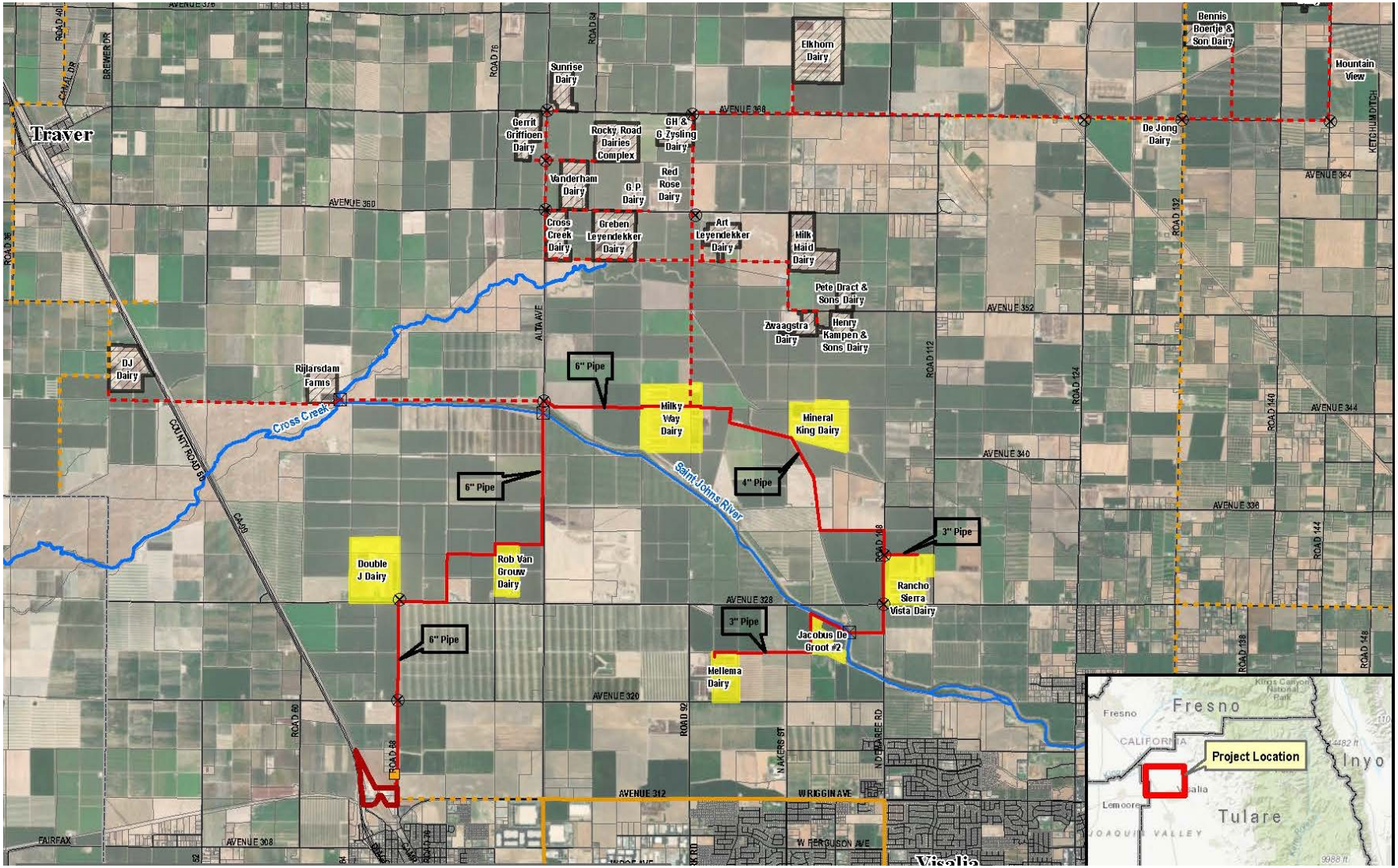
7. Maintain flexibility on EPC

- Provides an option to projects
- Utility helpful long-lead equipment ordering

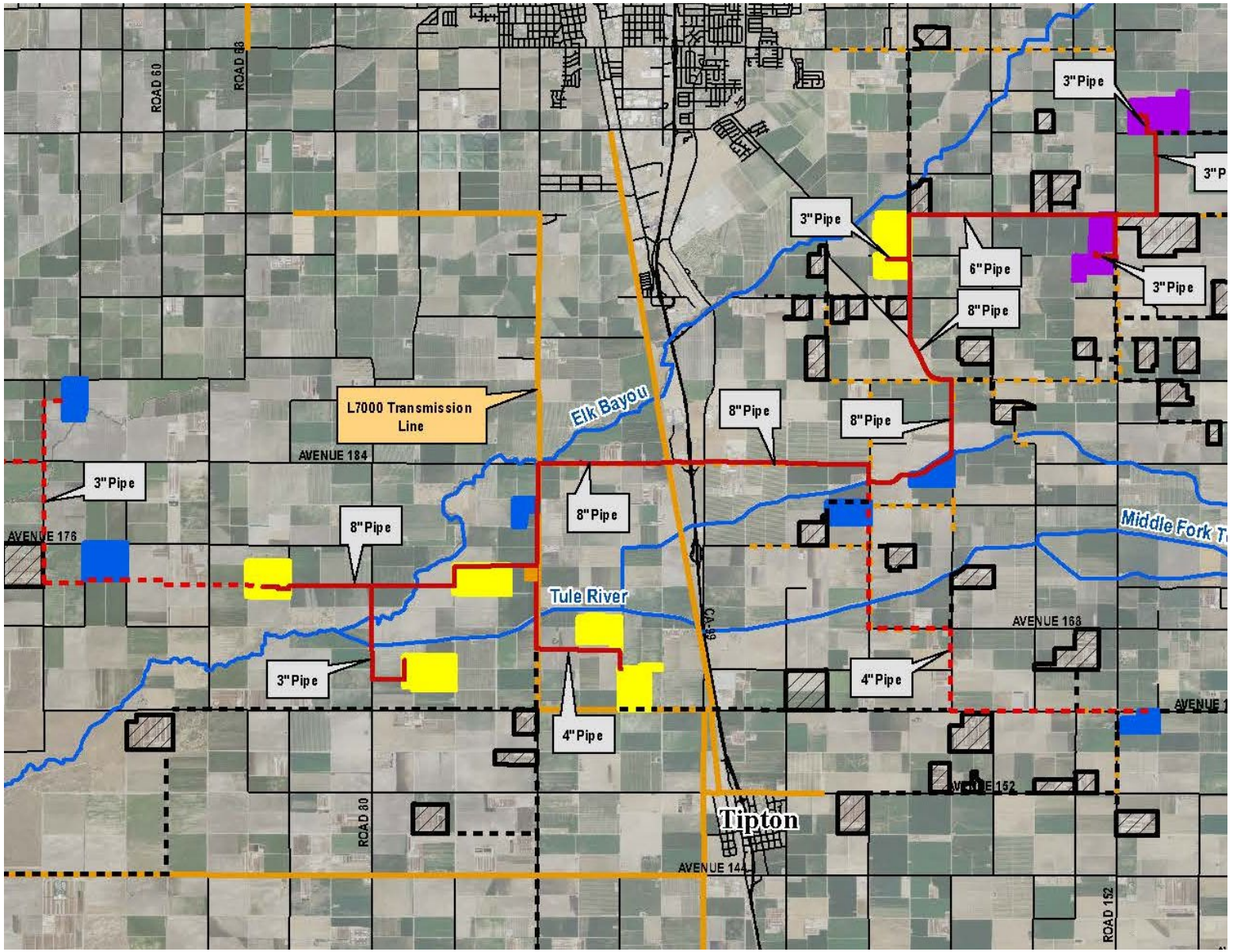
Hub (gas cleanup) & Spoke (dairy digester)



Cluster – North Visalia



Cluster – South Tulare



Cluster – Buttonwillow